

AMENDMENTS TO THE CLAIMS**10/529001**
JC17 Rec'd PCT/PTO 24 MAR 2005

This listing of the claims will replace all prior version, and listing of claims in the application.

Listing of the Claims

What is claimed is:

1. (CURRENTLY AMENDED) An antimicrobial composition comprising (a) an antimicrobially effective amount of a dissolved antimicrobial metal ion and (b) a dissolved halide ion, wherein the halide ion is present in a sufficient excess relative to the amount of the metal ion present to ~~stabilise~~ stabilize the antimicrobial activity of the metal ion against loss on exposure to light and gamma radiation.
2. (ORIGINAL) An antimicrobial composition according to claim 1, wherein the ions are dissolved in a solvent comprising one or both of water and an organic polyhydric alcohol.
3. (ORIGINAL) An antimicrobial composition according to claim 2, wherein the organic polyhydric alcohol is glycerol or sorbitol.
4. (ORIGINAL) An antimicrobial composition according to claim 2, wherein the solvent comprises water.
5. (CURRENTLY AMENDED) An antimicrobial composition according to claim 1 ~~any one of the preceding claims~~, wherein the antimicrobial metal ion is silver.
6. (CURRENTLY AMENDED) An antimicrobial composition according to claim 1 ~~any one of the preceding claims~~, wherein the halide ion is present in an at least about 450-fold molar excess relative to the metal ion.
7. (ORIGINAL) An antimicrobial composition comprising dissolved halide ion and an antimicrobially effective amount of dissolved silver ion, wherein the halide ion is present in an at least about 450-fold molar excess relative to the amount of the silver ion present.
8. (ORIGINAL) An antimicrobial composition according to claim 7, wherein the ions are dissolved in a solvent comprising one or both of water and an organic polyhydric alcohol.

9. (ORIGINAL) An antimicrobial composition according to claim 8, wherein the organic polyhydric alcohol is glycerol or sorbitol.
10. (ORIGINAL) An antimicrobial composition according to claim 8, wherein the solvent comprises water.
11. (CURRENTLY AMENDED) An antimicrobial composition according to claim 7 ~~any one of the preceding claims~~, wherein the equivalent relative humidity or water activity of the composition does not exceed about 75%.
12. (CURRENTLY AMENDED) An antimicrobial composition according to claim 7 ~~any one of the preceding claims~~, wherein the equivalent relative humidity or water activity of the composition does not exceed about 70%.
13. (CURRENTLY AMENDED) An antimicrobial composition according to claim 7 ~~any one of the preceding claims~~, wherein the halide ion is chloride.
14. (CURRENTLY AMENDED) An antimicrobial composition according to claim 7 ~~any one of the preceding claims~~, wherein the halide ion is present in an at least about 500-fold molar excess relative to the metal ion.
15. (CURRENTLY AMENDED) An antimicrobial composition according to claim 7 ~~any one of the preceding claims~~, wherein the composition is effectively free of other agents for ~~stabilising~~ stabilizing the antimicrobial activity of the metal ion against light and gamma other radiation.
16. (CURRENTLY AMENDED) An antimicrobial composition according to claim 7 ~~any one of the preceding claims~~, wherein the composition is effectively free of chelating agents for the antimicrobial metal ion.
17. (CURRENTLY AMENDED) An antimicrobial composition according to claim 7 ~~any one of the preceding claims~~, wherein the composition is effectively free of acyclic polyethers complexed with the antimicrobial metal ion.
18. (CURRENTLY AMENDED) An antimicrobial composition according to claim 7 ~~any one of the preceding claims~~, wherein the composition is effectively free of copper and zinc ions.
19. (CURRENTLY AMENDED) A light-stable antimicrobial hydrogel composition comprising a hydrogel polymer and an antimicrobially effective amount of an antimicrobial composition according to claim 1 ~~any one of the preceding claims~~.
20. (ORIGINAL) A hydrogel composition according to claim 19, wherein the hydrogel polymer is selected from polymers formed from monomers selected from: the sodium

salt of acrylic acid, the sodium salt of methacrylic acid, the potassium salt of acrylic acid, the potassium salt of methacrylic acid, the sodium salt of 3-sulphopropyl acrylate, the sodium salt of 3-sulphopropyl methacrylate, the potassium salt of 3-sulphopropyl acrylate, the potassium salt of 3-sulphopropyl methacrylate, the sodium salt of 2-acrylamido-2-methylpropane sulphonic acid, the potassium salt of 2-acrylamido-2-methylpropane sulphonic acid, a quaternary ammonium salt of acrylic acid, a quaternary ammonium salt of methacrylic acid, a quaternary ammonium salt of an N-substituted acrylamide, N-acryloylmorpholine, acrylamide, N-substituted acrylamide, acrylic acid, methacrylic acid, N-vinyl lactams, N-vinyl pyrrolidone, and any combination thereof.

21. (CURRENTLY AMENDED) A hydrogel composition according to claim 19 ~~or 20~~, further comprising one or more other ingredients, preferably in minor amounts compared with the ingredients stated in the said claim 19 ~~or 20~~.
22. (CURRENTLY AMENDED) A hydrogel composition according to claim 19 ~~claim 21~~, wherein the said ~~one or more~~ other ingredients is selected from the group consisting of: one or more ionic and/or non-ionic compounds, such as medicaments selected from the group consisting of (~~for example~~: antiseptics, additional antimicrobial agents, antibiotics, analgesics, and anaesthetics), humectants selected from the group consisting of (~~for example~~: glycerol, and sorbitol), vitamins, adhesion enhancers such as (~~for example~~: vinyl acetate dioctylmaleate copolymers), pH buffers, surfactants and water soluble polymers selected from the group consisting of (~~for example~~: polysaccharides and synthetic polymers).
23. (CURRENTLY AMENDED) A hydrogel composition according to claim 19 ~~any one of claims 19 to 22~~, selected from sheet hydrogels, shaped hydrogels, amorphous hydrogels and foamed hydrogels.
24. (CURRENTLY AMENDED) A hydrogel composition according to claim 19 ~~any one of claims 19 to 23~~, further comprising an organic ~~plasticiser~~ plasticizer or humectant and being bioadhesive.
25. (CURRENTLY AMENDED) A pharmaceutical composition, preferably for topical application, comprising an antimicrobially effective amount of a composition according to claim 1 ~~any one of the preceding claims~~ as an active antimicrobial agent in a pharmaceutically acceptable carrier.

26. (CURRENTLY AMENDED) A medical device comprising an antimicrobially effective amount of a composition according to claim 1 ~~any one of claims 1 to 24~~ as an active antimicrobial agent.
27. (CURRENTLY AMENDED) A medical device according to claim 26, which is a wound dressing comprising an antimicrobially effective amount of a composition according to any one of claims 1 to 24 as an active antimicrobial agent.
28. (CURRENTLY AMENDED) A medical device according to claim 26, which is a suture comprising an antimicrobially effective amount of a composition according to any one of claims 1 to 24 as an active antimicrobial agent.
29. (CURRENTLY AMENDED) A method of treating or preventing microbial infection in a human or non-human animal in need thereof, which comprises administering to the human or non-human animal an antimicrobially effective amount of a composition according to claim 1 ~~any one of claims 1 to 25~~.
30. (CURRENTLY AMENDED) A method according to claim 29, wherein the administration is carried out by using the composition of claim 1 as an active ingredient in a pharmaceutical composition, a medical device, a wound dressing, or a suture according to claim 25 in a surgical or therapeutic method.
31. (CANCEL)
32. (CANCEL)
33. (CANCEL)
34. (CURRENTLY AMENDED) In an antimicrobial composition comprising (a) an antimicrobially effective amount of a dissolved antimicrobial metal ion and (b) a dissolved halide ion present in a molar excess relative to the metal ion, a method of stabilizing the use of sufficient excess of the halide ion to stabilise the antimicrobial activity of the metal ion against loss on exposure to light and gamma radiation, preferably without the need for non-halide stabilising stabilizing agents, comprising providing the halide ion in a stabilizing effective excess relative to metal ion.
35. (CURRENTLY AMENDED) A method ~~use~~ according to claim 34, wherein the composition is a composition according to claim 7 ~~any one of claims 2 to 24 or is present in a pharmaceutical composition, medical device, wound dressing or suture according to any one of claims 25 to 28.~~
36. (CURRENTLY AMENDED) ~~In a~~ A photo- and/or gamma-activated polymerisation polymerization process for preparing an antimicrobial hydrogel composition

comprising a hydrogel polymer and an antimicrobially effective amount of a dissolved antimicrobial metal ion, ~~the use of wherein~~ a sufficient molar excess, relative to the metal ion, of a dissolved halide ion is present in a polymerisable pre-mix containing the metal ion and to be exposed to light and/or gamma radiation for the said ~~polymerisation~~ polymerization, to ~~stabilise~~ stabilize the antimicrobial activity of the metal ion against loss on exposure of the metal ion to the said light and/or gamma radiation during the said ~~polymerisation~~ polymerization, preferably without the need for non-halide ~~stabilising~~ stabilizing agents.

37. (CURRENTLY AMENDED) A process ~~use~~ according to claim 36, wherein the composition is a composition according to claim 7 ~~any one of claims 2 to 24 or is a composition for use in a pharmaceutical composition, medical device, wound dressing or suture according to any one of claims 25 to 28.~~
38. (NEW) A light-stable antimicrobial hydrogel composition comprising a hydrogel polymer and an antimicrobially effective amount of an antimicrobial composition according to claim 7.
39. (NEW) A hydrogel composition according to claim 38, wherein the hydrogel polymer is selected from polymers formed from monomers selected from: the sodium salt of acrylic acid, the sodium salt of methacrylic acid, the potassium salt of acrylic acid, the potassium salt of methacrylic acid, the sodium salt of 3-sulphopropyl acrylate, the sodium salt of 3-sulphopropyl methacrylate, the potassium salt of 3-sulphopropyl acrylate, the potassium salt of 3-sulphopropyl methacrylate, the sodium salt of 2-acrylamido-2-methylpropane sulphonic acid, the potassium salt of 2-acrylamido-2-methylpropane sulphonic acid, a quaternary ammonium salt of acrylic acid, a quaternary ammonium salt of methacrylic acid, a quaternary ammonium salt of an N-substituted acrylamide, N-acryloylmorpholine, acrylamide, N-substituted acrylamide, acylic acid, methacrylic acid, N-vinyl lactams, N-vinyl pyrrolidone, and any combination thereof.